Special Issue

Nonlinear and Ultrafast Optics: Fundamentals and Applications

Message from the Guest Editors

This Special Issue aims to bring together contributions from the leading scientists and optical engineers around the world and describe recent developments, as well as the prospects and challenges facing the astonishing field of nonlinear and ultrafast optics. **Topics of interest include, but are not limited to, the following:**

- High-power laser sources and laser resonators;
- Nonlinear beam guiding;
- Light bullets;
- Nonlinear optical fiber communications;
- Optical nonlinearity in micro/nano-applications;
- Nonlinearity in photonics and plasmonics;
- Novel nonlinear optoelectronic materials and devices;
- Femtosecond nonlinear optics;
- Ultrafast laser-matter interaction; filamentation, supercontinuum, THz and microwave-field generation;
- Nonlinear atmospheric/oceanic optics;
- Nonlinear atmospheric propagation, remote sensing and lightning control;
- Earth-space-Earth laser communications and space debris removal;
- Optical nonlinearity in biomedical applications;
- Nonlinear ultrafast quantum sciences and technology;
- Applied industrial nonlinear and ultrafast optics.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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